1.   A polymer composition comprising ethylene interpolymerized with at least one unsaturated comonomer, wherein the composition is characterized as having:

a)   a M_w/M_n of less than or equal to 3.3, as determined by gel permeation chromatography (GPC),

b)   an I_{10}/I_2 in the range of from greater than 6.6 to about 8.2, as determined in accordance ASTM D-1238, Condition 190°C/2.16 kg and Condition 190°C/10 kg,

c)   a composition density less than 0.945 gram/cubic centimeter, as determined according to ASTM-792,

d)   at least two polymer components, the first component having a first viscosity average molecular weight, M_{v1}, and the second component having a second viscosity average molecular, M_{v2}, wherein M_{v1}/M_{v2} is less than or equal to 1, as determined using ATREF-DV, and

e)   a first ATREF peak temperature, T_{peak1} and a second ATREF peak temperature, T_{peak2}, corresponding to the at least two components and as determined using analytical temperature rising elution fraction (ATREF), wherein the temperature differential between T_{peak2} and T_{peak1}, ΔT, decreases with increased composition density such that ΔT is less than 23°C at composition densities of greater than or equal to 0.926 g/cm^3 and is greater than 13°C at composition densities less than or equal to 0.92 g/cm^3.

2.   A process for making an ethylene polymer composition comprised of ethylene interpolymerized with at least one unsaturated comonomer and characterized as having:

a)   a M_w/M_n of less than or equal to 3.3, as determined by gel permeation chromatography (GPC),

b)   an I_{10}/I_2 in the range of from greater than 6.6 to about 8.2, as determined in accordance ASTM D-1238, Condition 190°C/2.16 kg and Condition 190°C/10 kg,

c)   a composition density less than 0.945 gram/cubic centimeter, as determined according to ASTM-792,

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d) at least two polymer components, the first component having a first viscosity average molecular weight, M_{v1}, and the second component having a second viscosity average molecular, M_{v2}, wherein M_{v1}/M_{v2} is less than or equal to 1, as determined using ATREF-DV, and

e) a first ATREF peak temperature, T_{peak1} and a second ATREF peak temperature, T_{peak2}, corresponding to the at least two components and as determined using analytical temperature rising elution fraction (ATREF), wherein the temperature differential between T_{peak2} and T_{peak1}, ΔT, decreases with increased composition density such that ΔT is less than 23°C at composition densities of greater than or equal to 0.926 g/cm^3 and is greater than 13°C at composition densities less than or equal to 0.92 g/cm^3, the process comprising continuously operating at least two polymerization reactors.

3. A fabricated article comprising an ethylene interpolymer composition which comprises ethylene interpolymerized with at least one unsaturated comonomer and is characterized as having:

a) a M_w/M_n of less than or equal to 3.3, as determined by gel permeation chromatography (GPC),

b) an I_{10}/I_2 in the range of from greater than 6.6 to about 8.2, as determined in accordance ASTM D-1238, Condition 190°C/2.16 kg and Condition 190°C/10 kg,

c) a composition density less than 0.945 gram/cubic centimeter, as determined according to ASTM-792,

d) at least two polymer components, the first component having a first viscosity average molecular weight, M_{v1}, and the second component having a second viscosity average molecular, M_{v2}, wherein M_{v1}/M_{v2} is less than or equal to 1, as determined using ATREF-DV, and

e) a first ATREF peak temperature, T_{peak1} and a second ATREF peak temperature, T_{peak2}, corresponding to the at least two components and as determined using analytical temperature rising elution fraction (ATREF), wherein the temperature differential between T_{peak2} and T_{peak1}, ΔT, decreases

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with increased composition density such that ΔT is less than 23°C at composition densities of greater than or equal to 0.926 g/cm^3 and is greater than 13°C at composition densities less than or equal to 0.92 g/cm^3.

4. A polymer composition comprising ethylene interpolymerized with at least one unsaturated comonomer, wherein the composition is characterized as having:

a) a M_w/M_n of less than or equal to 3.3, as determined by gel permeation chromatography (GPC),

b) an I_{10}/I_2 ratio greater than 6.6, as determined in accordance ASTM D-1238, Condition 190°C/2.16 kg and Condition 190°C/10 kg,

c) a composition density less than 0.945 gram/cubic centimeter, as determined according to ASTM-792,

d) at least two polymer components, the first component having a first viscosity average molecular weight, M_{v1}, and the second component having a second viscosity average molecular, M_{v2}, wherein M_{v1}/M_{v2} is in the range of from about 0.6 to about 1.2, as determined using ATREF-DV, and

e) a first ATREF peak temperature, T_{peak1} and a second ATREF peak temperature, T_{peak2}, corresponding to the at least two components and as determined using analytical temperature rising elution fraction (ATREF), wherein the temperature differential between T_{peak2} and T_{peak1}, ΔT, a ΔT which is equal to or less than the product of the equation:

$$\Delta T = [5650.842 \times \rho^2] - [11334.5 \times \rho] + 5667.93$$

wherein ΔT is in degrees Celsius and ρ is composition density in g/cm^3

5. The fabricated article of Claim 3 wherein the article is a film, film layer, coating, sealant, molding, pouch, bag, patch or sheet.

6. The fabricated article of Claim 5 wherein the film is a laminating film.

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7. The fabricated article of Claim 5 wherein the film is in the form of a liner, trash-bag or heavy duty shipping sack.

8. The fabricated article of Claim 5 wherein the film is blown film.

9. The composition of Claim 1 wherein the at least one unsaturated comonomer is α-olefin selected from the group consisting of propylene, 1-butene, 1-isobutylene, 1-hexene, 4-methyl-1-pentene, 1-pentene, 1-heptene and 1-octene.

10. The process of Claim 2 wherein one of the at least two reactors is a recirculating loop reactor.

11. The process of Claim 2 wherein the at least two reactors are recirculating loop reactors.

12. The process of Claim 2 wherein the process comprises continuous solution polymerization.

13. The process of Claim 11 further comprising the steps of:

(i) feeding to the first reactor a constrained geometry catalyst system,

(ii) feeding to the second reactor a magnesium-supported titanium catalyst system characterized by a Mg:Ti molar ratio of 40 moles magnesium to less than 2 moles titanium and having a support surface area in the range of about 400 to about 430 m^2/g, and

(iii) operating the polymerization reaction system at a production split to the first reactor in the range of from about 60 to about 75 weight percent (based on the total incoming feed to the entire polymerization system),

wherein each reactor is characterized as comprising at least one heat exchange apparatus.

14. The process of Claim 13 wherein the at least one heat exchange apparatus removes heat of reaction or polymerization from the reaction stream of the process at a rate of at least 7.4 $kW/m^3 \bullet °K$.

5   15. The composition of Claim 1 wherein the I_{10}/I_2 ratio is greater than or equal to 7.1, as determined in accordance with ASTM D-1238, Condition 190°C/2.16 kg and Condition 190°C/10 kg.

16. The composition of Claim 1 further characterized as having a density

10   differential less than or equal to 0.028 g/cm^3, as measured in accordance with ASTM D-792.

17. The composition of Claim 1 wherein M_{v1}/M_{v2} is in the range of from about 0.8 to about 1, as determined using an ATREF-DV technique.

15   18. The composition of Claim 1 further characterized as having greater than or equal to 0.08 long chain branches per 10,000 carbons.

19. The composition of Claim 1 wherein at least one of the first polymer component or second polymer component is prepared using a homogeneous catalyst system.

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20. The composition of Claim 19 wherein the homogenous catalyst system is a constrained geometry catalyst system.

21. The composition of Claim 1 wherein the first polymer component is prepared

25   using a homogeneous catalyst system .

22. The composition of Claim 21 wherein the homogeneous catalyst system is a constrained geometry catalyst system and the second polymer component is prepared using a heterogeneous titanium, vanadium or zirconium catalyst system.

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23. The composition of Claim 1 wherein the first polymer component is a substantially linear ethylene polymer.

24. The composition of Claim 23 wherein the second polymer component is a heterogeneously branched ethylene polymer.

25. The composition of Claim 1 wherein the first polymer component is a homogeneously branched linear ethylene polymer.

26. The composition of Claim 25 wherein the second polymer component is a heterogeneously branched ethylene polymer.

27. The composition of Claim 1 wherein both the first and second polymer components are homogeneously branched ethylene polymers.

28. The composition of Claim 27 wherein at least one of the homogeneously branched ethylene polymers is a substantially linear ethylene polymer.

29. The composition of any one of Claims 20, 23 or 28 wherein the substantially linear ethylene polymer is characterized as having:

(a) a molecular weight distribution, M_w/M_n, defined by the equation:

$$M_w/M_n \le (I_{10}/I_2) - 4.63,$$

(b) a melt flow ratio, $I_{10}/I_2 \ge 5.63$, and

(c) a gas extrusion rheology such that the critical shear rate at onset of surface melt fracture for the substantially linear ethylene polymer is at least 50 percent greater than the critical shear rate at the onset of surface melt fracture for a linear ethylene polymer, wherein the substantially linear ethylene polymer and the linear ethylene polymer comprise the same comonomer or comonomers, the linear ethylene polymer has an I_2 and M_w/M_n within ten percent of the substantially linear ethylene polymer and wherein the respective critical shear rates of the substantially linear ethylene polymer and the linear ethylene polymer are measured at the same melt temperature using a gas extrusion rheometer.

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30.   The composition of Claim 29 wherein the substantially linear ethylene polymer is further characterized as having a single DSC melting point and is an interpolymer of ethylene with at least one C_3-C_{20} α-olefin.